740C xWDM OTDR Series

C-BAND DWDM AND 18-WAVELENGTH CWDM TUNABLE OTDR SERIES FOR METRO ETHERNET AND C-RAN LINK CHARACTERIZATION

iOLM READY

NEW OTDR GENERATION

C-Band DWDM and all 18 CWDM ITU channels in single OTDRs for testing through MUX/DEMUX channels, providing a complete end-to-end link characterization or troubleshooting for commercial services, C-RAN networks and metro Ethernet deployments.

SPEC SHEET

KEY FEATURES

- CWDM+DWDM combo available in compact FTB-1v2
- C-BAND ITU DWDM grid channels 17-62 selection in a single OTDR port
- 18 CWDM channels covered in a single OTDR port
- Test through MUX/DEMUX/OADM
- In-service testing of active networks
- High-resolution and short dead zones
- Select favorite channels list
- iOLM-ready: one-touch multiple acquisitions, with clear go/no-go results presented in a straightforward visual format

APPLICATIONS

- Single-ended construction and troubleshooting solution
- CWDM and DWDM metro Ethernet links
- Commercial services deployments
- Fiber deep, remote PHY and node splitting
- CBH antenna feeds and C-RAN networks

RELATED PRODUCTS AND OPTIONS

Platform
FTB-1v2/FTB-1 Pro

Platform
FTB-2/FTB-2 Pro

Fiber inspection probe
FIP-400B (WiFi or USB)

WAVELENGTH-DIVISION MULTIPLEXING BASICS

Wavelength-division multiplexing (WDM) is a technology that multiplexes (aggregates) several optical carrier signals onto a single optical fiber link by using different wavelengths in order to increase the bandwidth of an optical fiber link.

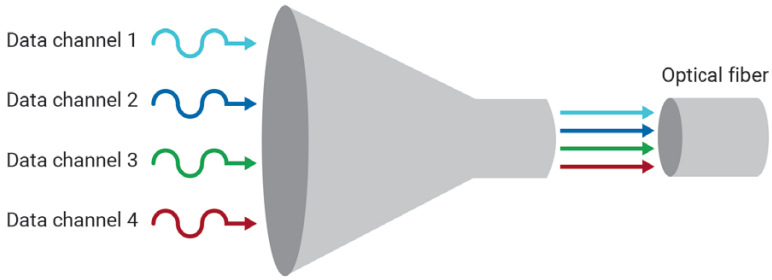


Figure 1. WDM acts as an "optical funnel" using different colors of light (wavelengths) for each signal.

CWDM VS. DWDM

Besides traditional WDM that relies on 1310 nm and 1550 nm, there are two main patterns aggregating a greater number of wavelengths/signals that have been widely used to expand the capacity of a network without adding more fiber: coarse wavelength division multiplexing (CWDM) and dense wavelength division multiplexing (DWDM).

CWDM uses up to 18 wavelengths, from 1271 nm to 1611 nm, with a channel spacing of 20 nm[a]. DWDM has been mainly deployed over the C-Band (1525–1565 nm) with channel spacing from 1.6 nm (200 GHz) to 0.4 nm (50 GHz)[b].

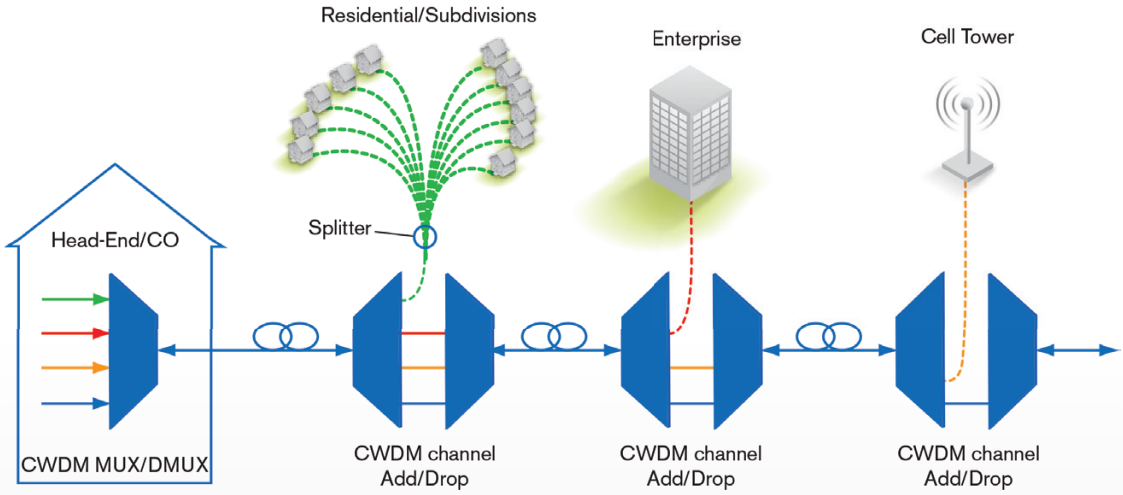


Figure 2. Each customer (enterprise or tower) receives a wavelength via an add/drop multiplexer (OADM)

APPLICATIONS

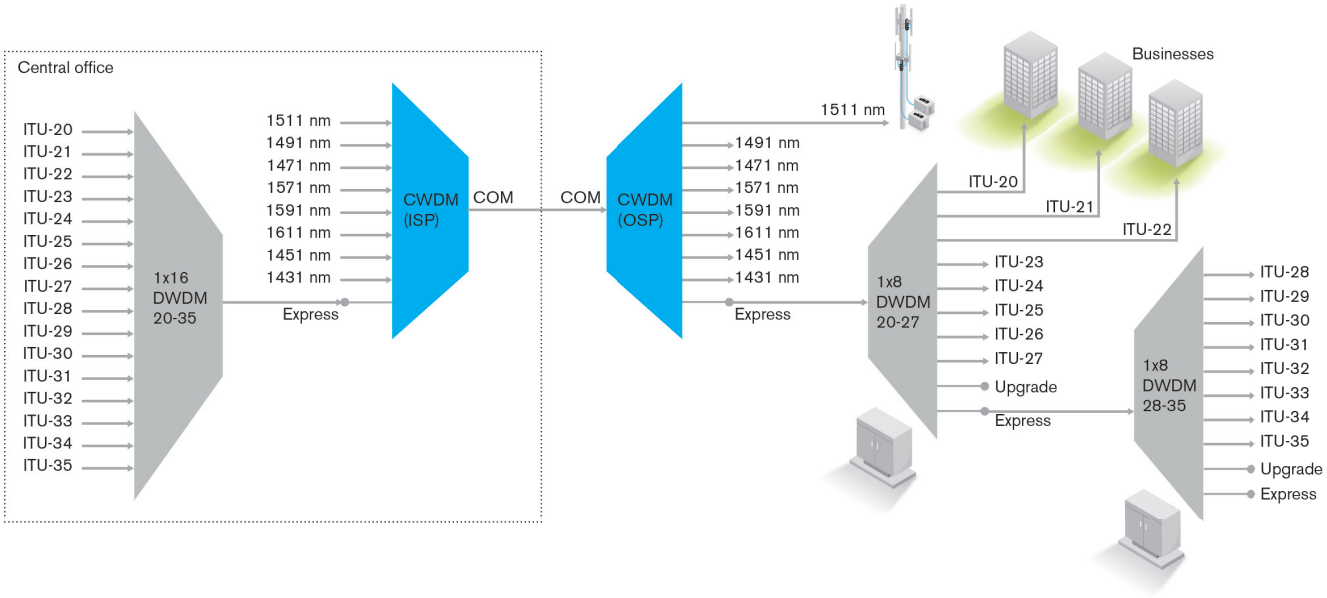
CWDM and DWDM are gaining popularity for C-RAN or commercial services deployments in which each wavelength can address a specific site, such as a cell tower or a customer.

Both CWDM and DWDM approaches are not mutually exclusive and co-exist in hybrid passive networks that feature DWDM over CWDM to maximize fiber capacity.

a. As defined in ITU-T G. 694.2

b. As per ITU-T G. 694.1, DWDM is also available over the L-Band (1570–1610 nm) and spectral grids are defined down 12.5 GHz channel spacing.

CWDM/DWDM PASSIVE NETWORKS



WHY USE AN xWDM OTDR DURING CONSTRUCTION?

Point-to-multipoint xWDM systems (CWDM and/or DWDM) in access networks, such as C-RAN or commercial services deployments, feature different topologies than in metro/core networks. In these scenarios, it is critical to ensure link continuity, meaning that the right wavelength is connected to the right port on the WDM multiplexer (MUX), demultiplexer (DEMUX) or optical add-drop modules (OADM). Wavelengths must be dropped at the right site by using the right OADM, and by connecting the fiber to the right port. It is a simple but very common issue in access networks of cable operators or fronthaul rings that could be avoided or fixed on-site before leaving the job site. An OTDR using the same channel/wavelength to test through MUX/DEMUX/OADM can provide users, from a single-ended, single operator, with a complete view of the link and total loss budget. Knowing the actual distances between the head-end and the target site, an OTDR can confirm that a wavelength is properly addressed.

USE A xWDM TUNABLE OTDR FOR:

- Single-ended CWDM/DWDM fiber characterization
- Validating the continuity and end-to-end loss through MUX, OADM and DEMUX, during construction
- In-service testing using the customer's wavelengths port–all without impacting other customer wavelengths and with no downtime
- Troubleshooting and characterization by a single operator from the head-end

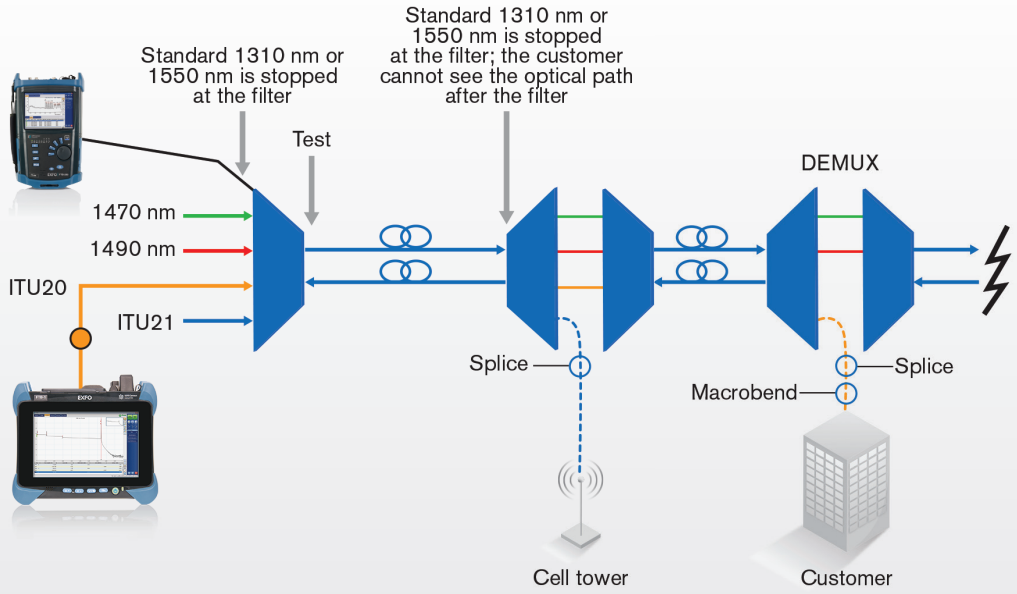


Figure 3. With a CWDM/DWDM OTDR, network service providers can see and validate the complete optical path prior to turning up the service.

740C xWDM OTDR SERIES

This series includes one CWDM tunable OTDR module to cover all 18 CWDM channels from a single port and one DWDM tunable OTDR module to cover DWDM C-Band channels. This solution is available in the FTB-1v2, FTB-2 and FTB-4 platforms.

The 740C xWDM OTDR series has been designed with EXFO's renowned high-quality standards to stabilize central channels under test, preventing any drift/leakage into adjacent channels, which would otherwise affect other valuable customers. The OTDR's GUI lets the technician define a list of favorite channels over the C-Band (DWDM) or CWDM grid (CWDM) for quicker access and a more efficient test routine.

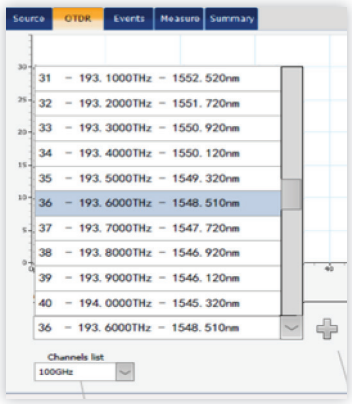


*Figure 4. FTB-740C-CWDM or FTB-740C-DWC single module for FTB-1v2 mainframe**

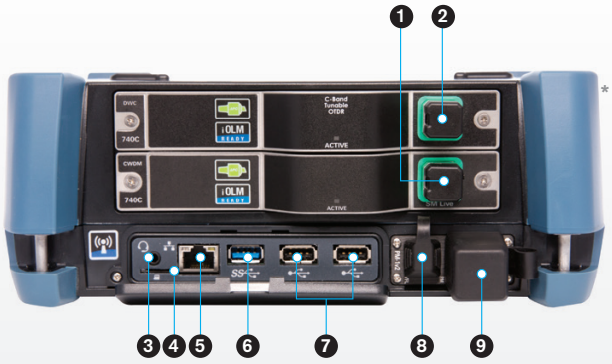
*Figure 5. FTBx-740C-CWDM or FTBx-740C-DWC single module for FTB-2/FTB-4 Pro mainframe**

TK-1V2-xWDM: COMPACT AND FULLY LOADED FOR HYBRID PASSIVE CWDM/DWDM NETWORKS

TK-1V2-xWDM includes both CWDM and DWDM OTDRs that are housed in the compact and powerful FTB-1v2 platform. With the best CWDM and DWDM testing specifications in the industry, field technicians are empowered to capture accurate, first-time-right measurements in the fastest manner possible without carrying heavy equipment, missing a wavelength or requiring users to swap modules to cover the complete application.

TK-1V2-xWDM is ideal for use for commercial services in fiber-to-the building (FTTB), fiber-to-the-premises (FTTP) and fronthaul deployments that are evolving and migrating from CWDM to hybrid DWDM or any other WDM point-to-multipoint network architecture. With this test kit, multiple-service operators (MSOs) and contractors always have the required CWDM or DWDM wavelength to characterize through MUX, OADM and DEMUX, provide complete end-to-end link characterization and validate complete optical paths prior to turning up a service or troubleshooting for commercial services.

1. CWDM OTDR port
2. DWDM OTDR port
3. Mic/headset jack
4. Micro SD card slot
5. 1 GigE port
6. One USB 3.0 port
7. Two USB 2.0 ports
8. VFL
9. Power meter



* This picture is shown as a guideline only. Actual module may differ.

LOADED WITH FEATURES TO BOOST YOUR EFFICIENCY

Real-time averaging

Activates the OTDR laser in continuous shooting mode; the trace refreshes in real time, enabling the monitoring of the fiber for a sudden change. Perfect for a quick overview of the fiber under test.

Automode

Used as a discovery mode, this feature automatically adjusts the distance range and the pulse width in function of the link under test. It is recommended to adjust the parameters to perform additional measurements to locate other events.

Zoom tools

Zoom and center to facilitate your fiber analysis. Draw a window around the area of interest and center into the screen quicker.

Set parameters on the fly

Dynamically change OTDR settings for the ongoing acquisition without stopping or returning to submenus.

iOLM—REMOVING THE COMPLEXITY FROM OTDR TESTING

OTDR TESTING COMES WITH ITS SHARE OF CHALLENGES. . .

- WRONG OTDR TRACES
- COUNTLESS TRACES TO ANALYZE
- REPEATING THE SAME JOB TWICE
- COMPLEX INSTRUMENT TRAINING/SUPPORT

iOLM | intelligent Optical Link Mapper

In response to these challenges, EXFO developed a better way to test fiber optics: the intelligent Optical Link Mapper (iOLM) is an OTDR-based application designed to simplify OTDR testing by eliminating the need to configure parameters, and/or analyze and interpret multiple complex OTDR traces. Its advanced algorithms dynamically define the testing parameters, as well as the number of acquisitions that best fit the network under test. By correlating multipulse widths on multiple wavelengths, the iOLM locates and identifies faults with maximum resolution–all at the push of a single button.

HOW DOES IT WORK?

Dynamic multipulse acquisition → Intelligent trace analysis → All results combined into a single link view → Comprehensive diagnosis →

Turning traditional OTDR testing into clear, automated, first-time-right results for technicians of any skill level.

Patent protection applies to the iOLM, including its proprietary measurement software. EXFO's Universal Interface is protected by US patent 6,612,750.

iOLM—REMOVING THE COMPLEXITY FROM OTDR TESTING (CONT'D)

THREE WAYS TO BENEFIT FROM THE iOLM

COMBO

Run both iOLM and OTDR applications (Oi code)

UPGRADE

Add the iOLM software option to your iOLM-ready unit, even while in the field

iOLM ONLY

Order a unit with the iOLM application only

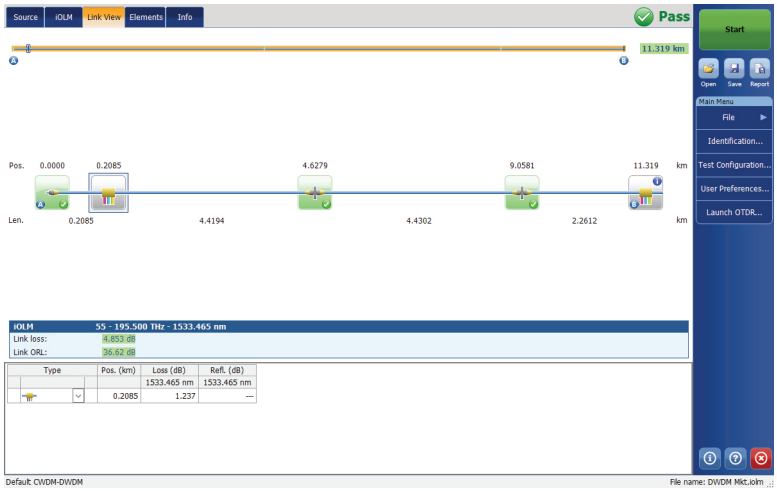
iOLM FEATURES VALUE PACK

In addition to the standard iOLM feature set, you can select added-value features as part of the **Advanced** or **Pro** packages. Please refer to the iOLM specification sheet for the complete and most recent description of these value packs.

iOLM FOR CWDM AND DWDM NETWORKS

All iOLM benefits tailored to CWDM and DWDM network topologies and challenges: optimized CWDM/DWDM algorithm, new icon to represent MUX, DEMUX and OADM.

Typical CWDM/DWDM passive networks will exhibit a series of high loss MUX/DEMUX or OADM, which would lead the technician to use longer pulse widths to reach the end of the link at the expense of front-end resolution, in a very similar way to what has been seen in PON networks. iOLM's dynamic multipulse acquisition accurately characterizes the complete link with all necessary pulses, for best resolution along the link and generating a single iOLM file per link to facilitate reporting.



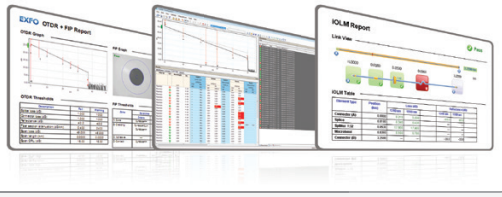
Many CWDM/DWDM passive networks rely on duplex fibers for TX/RX on the same wavelength, iLoop (iPro option) will greatly increase efficiency in those cases, by characterizing TX and RX link in a single acquisition. iLoop will guide the user in the test sequence and will automate all the process of generating single files and reports per link. [a]

GET THE BEST OUT OF YOUR DATA POST-PROCESSING

FastReporter 2
DATA POST-PROCESSING SOFTWARE

ONE SOFTWARE DOES IT ALL

This powerful reporting software perfectly complements your OTDR, and can be used to create and customize reports to fully address your needs.



Note

a. Please refer to the iOLM specification sheet for more details concerning iLoop.

FULLY AUTOMATED FIBER INSPECTION PROBE

Neglecting to clean, inspect and certify connectors can lead to serious, time-consuming problems accounting for up to 80% of network failures.

Equipped with the FIP-400B, it is now easy to include connector certification in your regular method of procedures without compromising the efficiency of your technicians. You'll no longer leave any stones unturned or any connectors uninspected!

Years of experience in the field has given EXFO the insight and expertise to re-engineer a truly unique and innovative fiber inspection probe that greatly simplifies and speeds up this critical step.

Housing a unique automatic focus-adjustment system, the FIP-400B automates each operation in the connector endface inspection sequence. **The result: fiber inspection is now a quick, one-step process that can be performed by technicians of all skill levels.**

FIVE MODELS TO FIT YOUR BUDGET

The FIP-410B: offers all the basic inspection features needed for manual inspection only.

The semi-automated FIP-420B: has the same features as the FIP-430B, without the automated focus adjustment.

The semi-automated FIP-425B: the wireless version of the semi-automated FIP-420B.

The FIP-430B: complete and fully automated feature set that includes the powerful fiber image-centering system, focus adjustment and optimization, and onboard pass/fail analysis.

The FIP-435B: go one step further with the wireless probe. Includes all FIP-430B features.

100% automated [a]

1-step process [a]

57% shorter test times [b]

FEATURES	USB WIRED			WIRELESS	
	Basic **FIP-410B**	Semi-automated **FIP-420B**	Fully automated **FIP-430B**	Semi-automated **FIP-425B**	Fully automated **FIP-435B**
Three magnification levels	√	√	√	√	√
Image capture	√	√	√	√	√
Five-megapixel CMOS capturing device	√	√	√	√	√
Automatic fiber image-centering function	X	√	√	√	√
Automatic focus adjustment	X	X	√	X	√
Onboard pass/fail analysis	X	√	√	√	√
Pass/fail LED indicator	X	√	√	√	√
WiFi connectivity	X	X	X	√	√

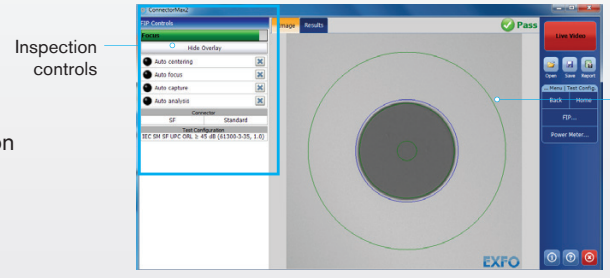
Notes

a. FIP-430B and FIP-435B models.

b. Data sourced from EXFO's case study, with calculation based on typical analysis time.

POWERFUL CONNECTOR ENDFACE IMAGE VIEWING AND ANALYSIS SOFTWARE

- Automatic pass/fail analysis of the connector endfaces
- Lightning-fast results in seconds with simple one-touch operation
- Complete test reports for future referencing
- Stores images and results for record-keeping



All specifications valid at 23 °C ± 2 °C with an FC/APC connector, unless otherwise specified.

TECHNICAL SPECIFICATIONS

	740C-CWDM	740C-DWC
Laser nominal wavelength (nm)	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610	C-Band tunable 1527.99-1563.86 nm ITU-T G694.1 Channels 17-62 (191.7 THz - 196.2 THz)
Central wavelength uncertainty (nm) [a]	±3	DWDM 50Ghz channel wavelength control
Channel spacing tuning	N/A	50 GHz and 100 GHz increments on ITU-T G694.1 grid
Dynamic range at 20 µs (dB) [b]	>37	40
Event dead zone (m) [c]	1.1	0.7
Attenuation dead zone (m) [c]	5	3.5
Distance range (km)	0.1 to 400	0.1 to 400
Pulse widths (ns)	5 to 20 000	5 to 20 000
Sampling points	Up to 256 000	Up to 256 000
Sampling resolution (m)	0.04 to 10	0.04 to 10
Distance accuracy (m) [d]	±(0.75 + 0.0025 % x distance + resolution)	±(0.75 + 0.0025 % x distance + resolution)

For complete details on all available configurations, refer to the ordering information section.

Notes

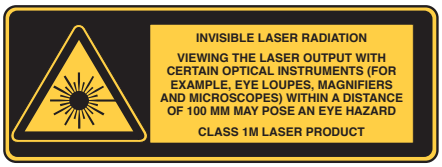
a. Typical, using 10 µs pulse.

b. Typical dynamic range with a three-minute averaging at SNR = 1.

c. Typical for reflectance at –45 dB, using a 5-ns pulse.

d. Does not include uncertainty due to fiber index.

LASER SAFETY



GENERAL SPECIFICATIONS

FTB module

FTBx module

Size (H x W x D)		50 mm x 254 mm x 210 mm (2 in x 10 in x 8 ¼ in)	158 mm x 24 mm x 174 mm (6 ¼ in x $^{15}/_{16}$ in x 6 $^{7}/_{8}$ in)
Weight		0.9 kg (2 lb)	0.4 kg (0.9 lb)
Temperature	Operation Storage	Refer to platform's specification sheet –40 °C to 70 °C (–40 °F to 158 °F)	Refer to platform's specification sheet –40 °C to 70 °C (–40 °F to 158 °F)
Relative humidity		0 % to 95 % non-condensing	0 % to 95 % non-condensing

SPECIFICATIONS FTB-1v2 [a]

Mainframe	Dual-core processor/4 GB RAM/Windows Embedded 8 Standard
Display	Multitouch, wide-screen, color, 1280 x 800 TFT 203 mm (8 inch)
Interfaces	RJ45 LAN 10/100/1000 Mbit/s Two USB 2.0 ports One USB 3.0 port Micro SD card slot 3.5 mm headset/microphone port
Storage	64 GB internal memory (flash)
Battery	Rechargeable Li-ion smart battery
Power supply	AC/DC adapter, input: ⏦ 100 – 240 V; 50/60 Hz; 2.5 A max. output: ⎓ 24 V; 3.75 A

GENERAL SPECIFICATIONS FTB-1v2 DUAL MODULE CAPACITY

Size (H x W x D)		210 mm x 254 mm x 96 mm (8 ¼ in x 10 in x 3 $^{13}/_{16}$ in)
Weight (with battery and modules)		3.3 kg (7.3 lb)
Temperature	Operation Storage	0 °C to 50 °C (32 °F to 122 °F) –40 °C to 70 °C (–40 °F to 158 °F) [b]
Relative humidity		0 % to 85 % non-condensing

BUILT-IN POWER METER SPECIFICATIONS (GeX) (optional) [c]

Calibrated wavelengths (nm)	850, 1300, 1310, 1490, 1550, 1625, 1650
Optional CWDM calibrated wavelengths (nm)	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1383 and 1625
Power range (dBm)	Typical 27 to –50
Uncertainty (%) [d]	±5 % ± 10 nW
Display resolution (dB)	0.01 = max to –40 dBm 0.1 = –40 dBm to –50 dBm

VISUAL FAULT LOCATOR (VFL) (optional)

Laser, 650 nm ± 10 nm
CW/Modulate 1 Hz
Typical P_{out} in 62.5/125 µm: –1.5 dBm (0.7 mW)
Laser safety: Class 2

LASER SAFETY

The test modules that you use with your unit may have different laser classes. Refer to the module's documentation for exact information.

Notes

a. All specifications valid at 23 °C (73 °F).

b. –20 °C to 60 °C (–4 °F to 140 °F) with the battery and –20 °C to 45 °C (–4 °F to 113 °F) for long-term storage.

c. At 23 °C ± 1 °C, 1550 nm and FC connector. With modules in idle mode. Battery-operated after warm-up.

d. At calibration conditions.

ORDERING INFORMATION—DWDM FTBx MODULE

FTBx-740C-DWC-XX-XX-XX

Model
FTBx-740C-DWC = DWDM Tunable SM OTDR
C-Band 1528-1564 nm (ITU 17-62), 100/50 GHz, 40 dB (9/125 µm)

Base software
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

Example: FTBx-740C-DWC-iOLM-iADV-EA-EUI-91

Singlemode connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

iOLM software option [a]
00 = iOLM Standard
iADV = iOLM Advanced
iPRO = iOLM Pro
iLOOP = iOLM loopback mode

ORDERING INFORMATION—DWDM FTB MODULE

FTB-740C-DWC-XX-XX-XX

Model
FTB-740C-DWC = DWDM Tunable SM OTDR
C-Band 1528-1564 nm (ITU 17-62), 100/50 GHz, 40 dB (9/125 µm)

Base software
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

Example: FTB-740C-DWC-iOLM-iADV-EA-EUI-91

Singlemode connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

iOLM software option [a]
00 = iOLM Standard
iADV = iOLM Advanced
iPRO = iOLM Pro
iLOOP = iOLM loopback mode

Note

a. Please refer to the iOLM specification sheet for the complete and most recent description of these value packs.

ORDERING INFORMATION—CWDM FTBX MODULE

FTBx-740C-CWXX-XX-XX-XX-XX

Model
CW10 = Singlemode CWDM OTDR module with 10 wavelengths:
1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm

CW18-M8W = Singlemode CWDM OTDR module with 8 activated wavelengths:
1470/1490/1510/1530/1550/1570/1590/1610 nm
Hardware ready and field upgradable to:
1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm

CW18-M10W = Singlemode CWDM OTDR module with 10 activated wavelengths:
1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm
Hardware ready and field upgradable to:
1270/1290/1310/1330/1350/1370/1390/1410 nm

CW18-M18W = Singlemode CWDM OTDR module with all 18 activated wavelengths:
1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm
1470/1490/1510/1530/1550/1570/1590/1610 nm

Example: FTBx-740C-CW18-M10W-iOLM-iADV-M1310W-OTDR-EA-EUI-91

Singlemode connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

Wavelength options
00 = No additional activated wavelengths
M1310W = Add 1310 nm wavelength [a]

iOLM software option [b]
00 = iOLM Standard
iADV = iOLM Advanced
iPRO = iOLM Pro
iLOOP = iOLM loopback mode

Base software
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

ORDERING INFORMATION—CWDM FTB MODULE

FTB-740C-CWXX-XX-XX-XX-XX

Model
CW10 = Singlemode CWDM OTDR module with 10 wavelengths:
1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm

CW18-M8W = Singlemode CWDM OTDR module with 8 activated wavelengths:
1470/1490/1510/1530/1550/1570/1590/1610 nm
Hardware ready and field upgradable to
1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm

CW18-M10W = Singlemode CWDM OTDR module with 10 activated wavelengths:
1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm
Hardware ready and field upgradable to:
1270/1290/1310/1330/1350/1370/1390/1410 nm

CW18-M18W = Singlemode CWDM OTDR module with all 18 activated wavelengths:
1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm
1470/1490/1510/1530/1550/1570/1590/1610 nm

Example: FTB-740C-CW18-M10W-iOLM-iADV-M1310W-OTDR-EA-EUI-91

Singlemode connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

Wavelength options
00 = No additional activated wavelengths
M1310W = Add 1310 nm wavelength [a]

iOLM software option [b]
00 = iOLM Standard
iADV = iOLM Advanced
iPRO = iOLM Pro
iLOOP = iOLM loopback mode

Base software
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

Notes

a. Available for models: CW18-M8W AND CW18-M10W.

b. Please refer to the iOLM specification sheet for the complete and most recent description of these value packs.

ORDERING INFORMATION—FTB-1v2 COMBO CWDM + DWDM

TK-1V2-xWDM-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX

Model
TK-1V2-xWDM = FTB-1V2 dual module capacity platform

Display
S1 = Standard display
S2 = Enhanced display for outdoor use

WiFi/Bluetooth® option
00 = Without RF option enabled
RF = With RF option/capability (WiFi/Bluetooth)
NRF = Without RF hardware components [a]

Memory
64G = 64 GB internal memory (flash)

Power meter
00 = Without power meter
VPM2X = VFL and power meter; GeX detector
VPM2X-CWDM = VFL and CWDM power meter, GeX detector

Power meter connector adapter [b]
FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC
FOA-28 = DIN 47256, DIN 47256/APC
FOA-54B = SC: SC/PC, SC/SPC, SC/UPC, SC/APC
FOA-96B = E-2000/APC
FOA-98 = LC

Inspection probe models [c]
00 = Without inspection probe
FP410B = Digital video inspection probe
Triple magnification
FP420B = Analysis digital video inspection probe
Automated pass/fail analysis
Triple magnification
Autocentering
FP425B = Wireless digital video inspection probe [d]
Automated pass/fail analysis
Triple magnification
Autocentering
FP430B = Automated analysis digital video inspection probe
Automated focus
Automated pass/fail analysis
Triple magnification
Autocentering
FP435B = Wireless analysis digital video inspection probe [d]
Automated focus
Automated pass/fail analysis
Triple magnification
Autocentering

Base tips
APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC
UPC = Includes FIPT-400-U25M and FIPT-400-FC-SC

Extra FIP-400B tips [e]
Bulkhead tips
FIPT-400-FC-SC = FC and SC tip for bulkhead adapter [f]
FIPT-400-LC-SQ = LC tip for bulkhead adapters
FIPT-400-LC-APC = LC/APC tip for bulkhead adapter
FIPT-400-SC-APC = SC APC tip for bulkhead adapter [g]

Patchcord tips
FIPT-400-U12M = Universal patchcord tip for 1.25 mm ferrules
FIPT-400-U12MA = Universal patchcord tip for 1.25 mm ferrules APC
FIPT-400-U25M = Universal patchcord tip for 2.5 mm ferrules [f]
FIPT-400-U25MA = Universal patchcord tip for 2.5 mm ferrules APC [g]

DWDM OTDR connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

iOLM DWDM software option [h]
00 = iOLM standard
iADV = iOLM advanced
iPRO = iOLM pro

Base software DWDM OTDR
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

DWDM OTDR
FTB-740C-DWC = SM Tunable DWDM OTDR Module C-Band 1528/1564 nm (ITU 17-62), 100/50 GHz, 40 dB (9/125um)

CWDM OTDR connector
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

iOLM CWDM software option [h]
00 = iOLM Standard
iADV = iOLM Advanced
iPRO = iOLM Pro
iLOOP = iOLM loopback mode

Base software CWDM OTDR
OTDR = Enables OTDR application only
iOLM = Enables iOLM application only
Oi = Enables OTDR and iOLM applications

CWDM Wavelength options
00 = No additional activated wavelengths
M1310W = Add 1310 nm wavelength [i]

CWDM OTDR
FTB-740C-CW10 = Singlemode CWDM OTDR module with 10 wavelengths: 1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm
FTB-740C-CW18-M8W = Singlemode CWDM OTDR module with 8 activated wavelengths: 1470/1490/1510/1530/1550/1570/1590/1610 nm Hardware ready and field upgradable to: 1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm
FTB-740C-CW18-M10W = Singlemode CWDM OTDR module with 10 activated wavelengths: 1430/1450/1470/1490/1510/1530/1550/1570/1590/1610 nm Hardware ready and field upgradable to: 1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm
FTB-740C-CW18-M18W = Singlemode CWDM OTDR module with all 18 activated wavelengths: 1270/1290/1310/1330/1350/1370/1390/1410/1430/1450 nm 1470/1490/1510/1530/1550/1570/1590/1610 nm

Software option [j]
00 = Without any software option
FR2-PL = FastReporter 2 software Fiber characterization package

Example: TK-1V2-WDM-S1-RF-64G-VPM2X-CWDM-FOA-54B-FP435B-APC-FR2-PL-FTB-740C-CW18-M18W-00-iOLM-iADV-EA-EUI-91-FTB-740C-DWC-iOLM-iADV-EA-EUI-91

Notes

a. Available only with S1 display.

b. Available if power meter is selected.

c. Includes ConnectorMax2 software.

d. Requires RF capability (WiFi and Bluetooth hardware option).

e. This list represents a selection of fiber inspection tips that covers the most common connectors and applications but does not reflect all the tips available. EXFO offers a wide range of inspection tips, bulkhead adaptors and kits to cover many more connector types and different applications. Please contact your local EXFO sales representative or visit www.EXFO.com/FIPtips for more information.

f. Included when UPC base tips are selected.

g. Included when APC base tips are selected.

h. Please refer to the iOLM specification sheet for the complete and most recent description of these value packs.

i. Available for CWDM OTDR model FTB-740C-CW18-M8W and FTB-740C-CW18-M10W.

j. Additional software options available. For an exhaustive list, consult the FTB-1v2 dedicated specification sheet.

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EI CONNECTORS

To maximize the performance of your OTDR, EXFO recommends using APC connectors on singlemode port. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly in dead zones. APC connectors provide better performance than UPC connectors, thereby improving testing efficiency.

For best results, APC connectors are mandatory with the iOLM application.

Note: UPC connectors are also available. Simply replace EA-XX by EI-XX in the ordering part number. Additional connector available: EI-EUI-90 (UPC/ST).

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